

and recording media including CD-ROMs. Such pieces of information typically include the contents of newspapers, magazines, computer programs and recorded videos and audios.

However, there arises the serious problem of pirate copies of these contents that are illegally sold or leased to unauthorized third parties because the electronic contents can be copied without degradation. In particular, there is no effective way of prohibiting the act of making pirate copies if the contents are sold on a payment on delivery basis, in the case where the accounting is done only when the user has obtained the contents. While there may be legal means of confiscating and destructing pirate copies to be taken by the related authorities and that of suing the pirates for the lost profit to be taken by the infringed, such actions entails enormous time and cost so that a large number of pirate copies are actually on the market.

The pay-per-view system is an alternative proposed to bypass the problem of pirate copies. With this system, the contents of information are encoded before being delivered to the subscriber so as to prevent the user from utilizing the contents at his or her free will. For example, the user is prohibited from keeping the contents in a decoded state and the encoded contents can be decoded each time the user uses them, so that the accounting is done when the encoded contents are decoded. By adopting this method, the accounting can be done without fail because the encoded contents must be decoded when the user uses them.

The paragraph bridging pages 3 and 4 has been amended as follows:

Since the encoded contents are decoded whenever they are used so that the user is charged for each decoding operation of the decoding section 2006. Specific examples of charging methods that can be used for the system under consideration include the one for up-

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loading the record of decoding operations stored in the user terminal 2000 to the information provider 1000 and charging collectively at a later date and the one for providing the user with a pre-paid card that can be used at the user terminal 2000 for decoding operations.

The paragraph bridging pages 8 and 9 has been amended as follows:

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According to another aspect of the present invention, there is provided an information utilization apparatus comprising: memory means for storing a delivered piece of information including encoded data and applicable time data defining the time period authorizing the use of the encoded data; a plurality of decoding means for decoding the encoded data stored in the memory means; a plurality of processing means arranged respectively corresponding to the plurality of decoding means for carrying out one of different sets of processing steps for an operation requested by the user on the data decoded by the decoding means; judging means, upon receiving a request for an operation from the user, for determining if the current time agrees with the time authorizing the use of the encoded data by referring to the applicable time data; operation command issuing means for issuing a command responding to the request for an operation to the corresponding decoding means and the corresponding processing means if the current time is determined by the judging means to agree with the time authorizing the use of the encoded data; and operation command reserving means for reserving the issuance of a command responding to the request for an operation until the time authorizing the use of the encoded data if the current time is determined by the judging means not to agree with the time authorizing the use of the encoded data.

The paragraph on page 15, lines 8-13, has been amended as follows:

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Note that the terms "encode/decode" used in this specification include the meanings of "encrypt/decrypt" and the like. Moreover, note that the term "data" (i.e., encoded or decoded data) includes the meaning of "contents" which appears in the detailed description of the invention.

The paragraph bridging pages 18 and 19 has been amended as follows:

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The information distributed from the information provider 100 to each user terminal 200 includes a condition package 104 and encoded contents 106. The condition package 104 includes a description on the encoding system, a charging system, and applicable time data describing the applicable time period for each mode of utilization of the information. The applicable time includes also "yes" or "no" for the displayability, the printability and the storability of the information respectively as in the case of conventional systems.

The paragraph on page 21, lines 17-20, has been amended as follows:

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Thus, data such as "yes" or "no" for the displayability, the printability and the storability of the information may be omitted if such applicable time data is used.

The paragraph bridging pages 22 and 23 has been amended as follows:

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Each of the condition judging section 204, the clock 206, the decoding section 208, the display processing section 210, the decoding section 212, the printing processing section 214, the decoding section 216 and the storage processing section 218 in FIG. 2 may be realized either by

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means of software or by means of hardware. Note that each of these components is so configured that the user cannot modify any part thereof. Additionally, these components may be realized in a hermetically sealed unitary chip that cannot be damaged from outside.

The paragraph on page 23, lines 25-26, has been amended as follows:

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Note that step S12 may precede step S11 or steps S11 and S12 may be carried out concurrently.

The paragraphs on page 24, lines 9-25, have been amended as follows:

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If it is determined in step S14 that the requested action (for display, printing or storage) can be taken, it issues a command for the action to the related decoding section (step S15). Note that, in this embodiment, a command is issued to the decoding section 208 for a displaying action, to the decoding section 212 for a printing action and/or to the decoding section 216 for a storing action.

Then, upon receiving a command, the decoding section decodes the encoded contents 106 and the related processing section outputs them to the related unit (step S16). More specifically, the plain contents are displayed on the display unit 230 by the display processing section 210, printed by the printing unit 240 under the control of the printing processing section 214 and/or stored in the external storage unit 250 by the external storage processing section 216.

The paragraphs commencing on page 25, line 23 and ending on page 26, line 18 have been amended as follows:

It may alternatively be so arranged for the above embodiment that the condition judging section 204 issues a command for an action to the display processing section 210, the printing processing section 214 and the storage processing section 218 simultaneously and only the relevant one or more than one of the display processing section 210, the printing processing section 214 and the storage processing section 218 operate for the specified action in response to the command issued from the condition judging section 204.

all While a decoding section is provided for each of the modes of utilization in the above embodiment, a single decoding section may be shared by all the modes of utilization. With such an arrangement, again, the condition judging section 204 issues a command for an action to the display processing section 210, the printing processing section 214 and the storage processing section 218 simultaneously and only the relevant one or more than one of the display processing section 210, the printing processing section 214 and the storage processing section 218 operate for the specified action in response to the command issued from the condition judging section 204.

The paragraph on page 27, lines 8-18, has been amended as follows:

all As in the case of the first embodiment, the information distributed from the information provider 100 to each user terminal 300 includes a condition package 104 and encoded contents 106. The condition package 104 includes a description on the encoding system, a charging system, and applicable time data describing the applicable time period for each mode of

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utilization of the information. The applicable time data includes also "yes" or "no" for the displayability, the printability and the storability of the information respectively as in the case of conventional systems.

The paragraph bridging pages 28 and 29 has been amended as follows:

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Thus, data such as "yes" or "no" for the displayability, the printability and the storability of the information may be omitted if the applicable time data is used.

The paragraph on page 30, lines 10-20, has been amended as follows:

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Each of the condition judging section 304, the clock 306, the decoding section 308, the plain contents storage section 310, the display processing section 312, the printing processing section 314 and the storage processing section 316 described above may be realized either by means of software or by means of hardware. Note that each of these components is so configured that the user cannot modify any part thereof. Additionally, these components may be realized in a hermetically sealed unitary chip that cannot be damaged from outside.

The paragraph on page 31, lines 9-10, has been amended as follows:

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Note that step S22 may precede step S21 or steps S21 and S22 may be carried out concurrently.

The paragraph bridging pages 32 and 33 has been amended as follows:

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If, on the other hand, it is found in step S31 that the operation for display has been carried out and hence the plain contents to be utilized are stored in the plain contents storage section 310, the condition judging section 304 picks up the condition package 104 of the information 102 to be utilized (step S32). If the condition package 104 contains "no" for the requested mode of utilization, the request is turned down at this time.

The paragraph on page 33, lines 9-10, has been amended as follows:

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Note that step S33 may precede step S32 or steps S32 and S33 may be carried out concurrently.

The paragraph bridging pages 33 and 34 has been amended as follows:

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Then, upon receiving a command, the processing section outputs the plain contents to the related unit 330 for display (step S37). Thus, the plain contents may be printed by the printing unit 340 under the control of the printing processing section 314 or stored in the external storage unit 350 by the storage processing section 316.

The paragraph bridging pages 34 and 35 has been amended as follows:

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According to FIG. 10, on the other hand, the routines as described earlier by referring to FIG. 8 are carried out in steps S42 and S43 if it is found in step S41 that the operation for display has not been carried out yet and hence the plain contents to be utilized are not stored in the plain

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contents storage section 310 so that, if the plain contents can be displayed, the encoded contents are decoded and displayed automatically.

The paragraph on page 38, lines 16-27, has been amended as follows:

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Each of the condition judging section 204, the clock 206, the decoding section 208, the display processing section 210, the decoding section 212, the printing processing section 214, the decoding section 216, the storage processing section 218 and the command memory section 220 described above may be realized either by means of software or by means of hardware. Note that each of these components is so configured that the user cannot modify any part thereof. Additionally, these components may be realized in a hermetically sealed unitary chip that cannot be damaged from outside.

The paragraph bridging pages 42 and 43 has been amended as follows:

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The command memory section 320 operates for storing the commands for actions sent from the condition judging section 304 and holds them for the future. The command memory section 320 is provided with a timer. The timer is used to specify the time and date when the decoding section 308 is authorized to decode the encoded contents for the requested action so that it generates a timer event when a predetermined time period has elapsed. Once a timer event is generated, the command memory section 320 transmits the related command it stores for an action to the decoding section 308 (and the related processing section).

The paragraph bridging pages 46 and 47 has been amended as follows:

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If the command memory section 320 stores more than one command, it carries out the processing operation of FIG. 17 for each and all of the stored commands. It may be so arranged that a command for display is issued first if the same contents are reserved for both display and another mode of utilization at a same appointed time or two respective appointed times that are close to each other.

The paragraph on page 47, lines 11-23, has been amended as follows:

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In FIG. 18, steps S101 through S109 are identical with steps S41 through S49 of FIG. 10. In other words, if the requested action is authorized to be taken at the current time and date, it is carried out at steps S101 through S109. On the other hand, the routines as described earlier by referring to FIG. 8 are carried out in steps S42 and S43 if it is found in step S41 that the operation for display has not been carried out yet and hence the plain contents to be utilized are not stored in the plain contents storage section 310 so that, if the plain contents can be displayed, the encoded contents are decoded and displayed automatically.

The paragraph bridging pages 47 and 48 has been amended as follows:

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On the other hand, if it is determined in step S101 that there exists the requested plain contents, the condition judging section 304 sends a control signal representing a command for the action that has to be reserved and data on the time and date when the request is authorized and hence the action can be taken to the command memory section 320 and sets the timer (step S110) even though the requested action is prohibited at the time and date of the request but there

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exists a time period during which the request can be authorized. As described above, it may be so arranged that a message saying that the request is reserved be displayed to notify the user thereof under this condition.

The paragraph bridging pages 48 and 49 has been amended as follows:

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When the timer event occurs after the predetermined time period, the processing steps are taken in a manner as described above by referring to FIG. 17. If the command memory section 320 stores more than one command as described above, it carries out the processing operation of FIG. 17 for each and all of the stored commands. It may be so arranged that a command for display is issued first if the same contents are reserved for both display and another mode of utilization at a same appointed time or two respective appointed times that are close to each other.

The paragraph bridging pages 50 and 51 has been amended as follows:

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It may alternatively be so arranged that, upon receiving a request for storage, the user terminal follows a set of processing steps as described above and transfers the plain contents corresponding to the request to the user computer instead of sending them to the storage unit of the terminal if the request is authorized any time thereafter (or a time comes when the request is authorized any time thereafter). The requesting user computer then stores the plain contents it receives. Since the use of the plain contents is authorized anytime thereafter, the user computer can utilize the plain contents it stores in any fashion.
